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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/582,285	04/10/2007	Wilfried Lubisch	ABB10010P02230US	2848
WOOD, PHILLIPS, KATZ, CLARK & MORTIMER 500 W. MADISON STREET			EXAMINER	
			KIFLE, BRUCK	
SUITE 3800 CHICAGO, IL 60661			ART UNIT	PAPER NUMBER
			1624	
			MAIL DATE	DELIVERY MODE
			07/20/2009	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)				
	10/582,285	LUBISCH ET AL.				
Office Action Summary	Examiner	Art Unit				
	Bruck Kifle	1624				
The MAILING DATE of this communication app Period for Reply	pears on the cover sheet with the c	orrespondence address				
· ·	V IS SET TO EVDIDE 2 MONTH/	S) OD THIDTY (20) DAVE				
A SHORTENED STATUTORY PERIOD FOR REPL' WHICHEVER IS LONGER, FROM THE MAILING D.  - Extensions of time may be available under the provisions of 37 CFR 1.1 after SIX (6) MONTHS from the mailing date of this communication.  - If NO period for reply is specified above, the maximum statutory period of Failure to reply within the set or extended period for reply will, by statute Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	ATE OF THIS COMMUNICATION 36(a). In no event, however, may a reply be tin will apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	N. nely filed the mailing date of this communication. D (35 U.S.C. § 133).				
Status						
1)⊠ Responsive to communication(s) filed on <u>15 Ju</u>	une 2009.					
• • • • • • • • • • • • • • • • • • • •	action is non-final.					
3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is						
closed in accordance with the practice under E	Ex parte Quayle, 1935 C.D. 11, 45	53 O.G. 213.				
Disposition of Claims						
4)⊠ Claim(s) <u>1-32</u> is/are pending in the application.						
4a) Of the above claim(s) <u>5</u> is/are withdrawn from consideration.						
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-4 and 6-32</u> is/are rejected.						
7) Claim(s) is/are objected to.						
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	r.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	ected to. See 37 CFR 1.121(d).				
11)☐ The oath or declaration is objected to by the Ex	caminer. Note the attached Office	Action or form PTO-152.				
Priority under 35 U.S.C. § 119						
12)⊠ Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	-(d) or (f).				
a)⊠ All b)□ Some * c)□ None of:						
1. Certified copies of the priority documents have been received.						
2. Certified copies of the priority documents have been received in Application No						
3. Copies of the certified copies of the priority documents have been received in this National Stage						
application from the International Bureau	• • • • • • • • • • • • • • • • • • • •					
* See the attached detailed Office action for a list	of the certified copies not receive	d.				
Attachment(s)						
Notice of References Cited (PTO-892)     Notice of Draftsperson's Patent Drawing Review (PTO-948)	4) ∭ Interview Summary Paper No(s)/Mail Da	(PTO-413) ate				
3) X Information Disclosure Statement(s) (PTO/SB/08)	5) Notice of Informal P					
Paper No(s)/Mail Date <u>08/06</u> .	6) [] Other:					

## Election/Restrictions

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Applicant's election without traverse of the compound of Example 3 in the reply filed on June 15, 2009 is acknowledged.

The elected species corresponds to the compound of formula (I) according to claim 1 when in claim 1, "A" represents N-C(W)-, wherein "W" is O, "B" is a bond (not CH<sub>2</sub> as said by Applicants), R<sup>v</sup> and R<sup>w</sup> are both hydrogens, R<sup>x</sup> and R<sup>y</sup> form a benzo, D is a 4 carbon alkylene chain (butylene), ring N-Z is piperazine (substituted by the group 2-tert-butyl-6-trifluoromethyl-pyrimidin-4-yl group). This compound is represented below.

RN 855782-41-1 CAPLUS
CN 1H-1-Benzazepine-2,5-dione, 1-[4-[4-[2-(1,1-dimethylethyl)-6-(trifluoromethyl)-4-pyrimidinyl]-1-piperazinyl]butyl]-3,4-dihydro-(CA INDEX NAME)

The elected compound was not found and the search was expanded to embrace the compound of formula (I) wherein "A" represents N-C(O)-, "B" is a bond, R<sup>x</sup> and R<sup>y</sup> form a benzo, D is an alkylene along with the full scope of the remaining variables. Claim 5 and subject matter not embraced by the group indicated as being searched are withdrawn from consideration. That is, subject matter under consideration is the benzazepine-2,5-dione core having an alkylene

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substituent (which is optionally substituted by oxo or which may be unsaturated) at "D" and the full scope of the remaining variables.

## Improper Markush Rejection

Claims 1-4 and 6-32 are rejected under a judicially created doctrine as being drawn to an improper Markush group, that is, the claims lack unity of invention. The variables A, B, R<sup>x</sup> and R<sup>y</sup> are defined in such a way that they keep changing the core of the compound that determines the classification. By changing these values, several patentably distinct and independent compounds are claimed. In order to have unity of invention the compounds must have "a community of chemical or physical characteristics" which justify their inclusion in a common group, and that such inclusion is not repugnant to principles of scientific classification" In re JONES (CCPA) 74 USPQ 149 (see footnote 2). The structural formula (I) does not have a significant structural feature that is shared by all of its alternatives which is inventive. The structure has only a small fragment as common. This feature is not inventive. Compounds embraced by formula (I) are so diverse in nature that a prior art anticipating a claim with respect to one member under 35 USC 102 would not render obvious the same claim under 35 USC 103. This is evidentiary of patentably distinct and independent inventions.

Limiting the claims to the group searched and examined would overcome this rejection.

## Claim Rejections - 35 USC § 112

Claims 1-4 and 6-32 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

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- i) The term "general" in the first line of claim 1 renders the claims indefinite because it implies more than what is positively recited in the claims. Deletion is suggested.
- ii) The term "substituted" without saying which substituents are intended is indefinite. One skilled in the art cannot say which substituents are permitted and which ones are not.
- iii) The term "heterocycle" is indefinite because it is not known how many atoms make up the ring, which atoms are present and what kind of a ring (monocyclic, bicyclic, spiro, fused, bridged, saturated, etc.) is intended. See definition of ring N-Z.
- iv) In claim 25, deletion of the term "optionally" in the last line is required because a pharmaceutical composition necessarily requires the presence of a carrier.

Claims 26-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claims contain subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

The how to use portion of the statute has not been addressed. This means that Applicants must teach the skilled practitioner, in this case a physician, how to treat a given subject. The physician clearly must know what disease and what symptoms are to be treated. In this case, Applicants have not provided what is being treated by claim 26, who the subject is, how one can identify said subject (i.e. how one can identify a subject in need), given no specific dose, given no specific dosing regimen, given no specific route of administration, and do not specify what diseases or symptom they intend to treat.

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Patent protection is granted in return for an enabling disclosure of an invention, not for vague intimations of general ideas that may or may not be workable. Tossing out the mere germ of an idea does not constitute enabling disclosure. Genentech Inc. v. Novo Nordisk 42 USPQ2d 1001.

As the Supreme Court said in *Brenner v. Manson*, 148 USPQ at 696: "a patent is not a hunting license. It is not a reward for the search, but compensation for its successful conclusion." As U.S. Court of Customs and Patent Appeals stated *In re Diedrich* 138 USPQ at 130, quoting with approval from the decision of the board: "We do not believe that it was the intention of the statutes to require the Patent Office, the courts, or the public to play the sort of guessing game that might be involved if an applicant could satisfy the requirements of the statutes by indicating the usefulness of a claimed compound in terms of possible use so general as to be meaningless and then, after his research or that of his competitors has definitely ascertained an actual use for the compound, adducing evidence intended to show that a particular specific use would have been obvious to men skilled in the particular art to which this use relates."

The origin and the nature of many central nervous system disorders such as Depression, Meningitis (viral, bacteria, or fungi infection), Encephalitis (viral infection), Rett syndrome, Tinnitus, Narcolepsy, Shy-Drager syndrome, Charcot-Marie-Tooth disease, Tarsal tunnel syndrome, Psychosis, Memory loss, Mental retardation, Autism, Migraine, Tension headache, Multiple sclerosis, etc are different one from the other. The symptoms and nature of these diseases are also different one from the other. Some CNS disorders are hereditary (Charcot-Marie-Tooth disease). Many CNS disorders vary in how they affect the body and its functions.

nervous system disorders in general.

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Diseases such as Cerebral palsy, and Parkinson's disease affect the movement of the patient.

Diseases such as Alzheimer's disease affect the memory of the patient. Since the origin and nature of CNS disorders vary extremely one from the other, it is impossible to treat central

Similarly, kidney function disorders arise from different causes and are treated differently.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bruck Kifle whose telephone number is 571-272-0668. The examiner can normally be reached on Mondays-Fridays from 8:30 AM -6:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James O. Wilson can be reached on 571-272-0661. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Bruck Kifle/ Primary Examiner Art Unit 1624